

Analog VSWR (Voltage Standing Wave Ratio) Meter

User's Manual

SD0809

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Getting Started

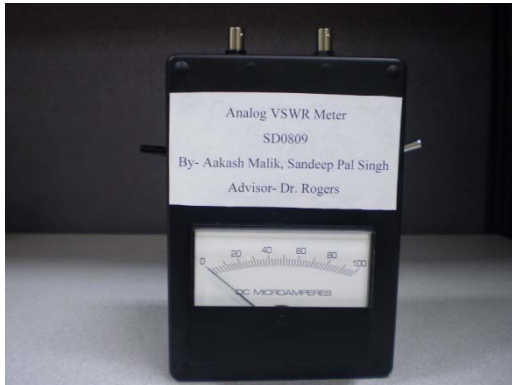
Parts Included:

- Handheld
 - ✓ Handheld enclosure with analog meter
 - ✓ 2 sets of coaxial cable
 - ✓ Enclosure Screws x4
- Dummy load
 - ✓ Enclosure
 - ✓ 1 set of coaxial cable
 - ✓ Enclosure Screws x4

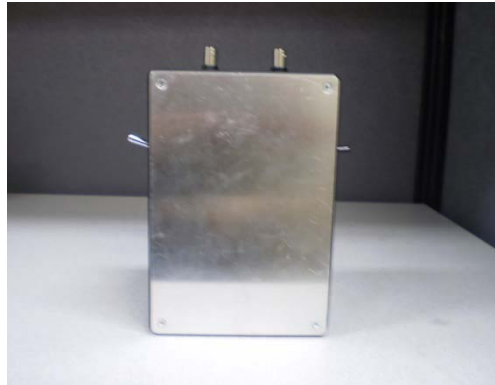
Extra parts required:

- Transceiver (for testing)
- Dummy load can be replaced by antenna after testing

Front View



Back View



Side View



Side View



Inside View



Instruction and Setup:

Instructions:

- Device will work for a frequency range of 1 MHz to 144MHz.
- Device will work for all power levels available in the transceiver.
- Before you key in the input make sure that all the connections are good.

Setup:

- Connect the transceiver/other input device to the TX-labeled BNC connector of the device using BNC-to-SMA coaxial cable.
- Connect the antenna/ dummy load to the ANT-labeled BNC connector of the device through BNC-to-BNC coaxial cable.
- Power on your transceiver/ input device, and connect a key to it.

Settings for the transceiver/ input device:

- Set the transceiver/ input device at CW frequency range.
- Select a frequency in the range of 1MHz to 144 MHz
- Turn the transceiver/ input device to MTR-PWR-SWR mode.
- Select a power level of the input signal.

Working:

- While the device is connected turn it to the forward mode (FWD) through the switch that's located on the right side of the device.
- Now tap and hold the key to send an input in the device, the meter will start showing some reading.

- Now while holding the key, adjust the variable resistor that is on the left side of the device, until you get the full scale reading.
- Once you get the full scale reading, leave the variable resistor at that value and release the key.
- Turn the device to reverse mode (REV) using the switch.
- Tap and hold the key again and note the reading.

VSWR:

- Divide the reading you got in the reverse mode with your full scale reading, and let's call it 'p'.
- Now your VSWR will be-

$$\frac{1 + p}{1 - p}$$

Troubleshooting:

Meter does not response.

- Is the device getting any input?
- Check the connections.

Meter does not display correct readings.

- Check the connections
- Check if correct load is connected or not.
- If the connections are all correct then try calibrating the meter by turning the needle screw that is located right below the display.
- Check what frequency and power level you are working with.
- Make sure that you are no using old and long coaxial cable.